

WHAT IS CLAIMED IS:

- 1 1. A method of screening drug candidates comprising:
 - 2 a) providing a cell that expresses an expression profile gene selected from the
 - 3 group consisting of an expression profile gene set forth in Table 1 or Table 2 or fragment
 - 4 thereof;
 - 5 b) adding a drug candidate to said cell; and
 - 6 c) determining the effect of said drug candidate on the expression of said
 - 7 expression profile gene.
- 1 2. A method according to claim 1 wherein said determining comprises
2 comparing the level of expression in the absence of said drug candidate to the level of
3 expression in the presence of said drug candidate.
- 1 3. A method of screening for a bioactive agent capable of binding to a
2 colorectal cancer modulator protein (colorectal cancer modulator protein), wherein said
3 colorectal cancer modulator protein is encoded by a nucleic acid selected from the group
4 consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof, said method
5 comprising:
 - 6 a) combining said colorectal cancer modulator protein and a candidate
7 bioactive agent; and
 - 8 b) determining the binding of said candidate agent to said colorectal cancer
9 modulator protein.
- 1 4. A method for screening for a bioactive agent capable of modulating the
2 activity of a colorectal cancer modulator protein, wherein said colorectal cancer modulator
3 protein is encoded by a nucleic acid selected from the group consisting of a nucleic acid of
4 Table 1 or Table 2 or a fragment thereof, said method comprising:
 - 5 a) combining said colorectal cancer modulator protein and a candidate
6 bioactive agent; and

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7 b) determining the effect of said candidate agent on the bioactivity of said
8 colorectal cancer modulator protein.

1 5. A method of evaluating the effect of a candidate colorectal cancer drug
2 comprising:

3 a) administering said drug to a patient;

4 b) removing a cell sample from said patient; and

5 c) determining the expression of a gene selected from the group consisting of a
6 nucleic acid of Table 1 or Table 2.

1 6. A method according to claim 5 further comprising comparing said
2 expression profile to an expression profile of a healthy individual.

1 7. A method of diagnosing colorectal cancer comprising:

2 a) determining the expression of one or more genes selected from the group
3 consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof or a polypeptide
4 encoded thereby in a first tissue type of a first individual; and

5 b) comparing said expression of said gene(s) from a second normal tissue type
6 from said first individual or a second unaffected individual;

7 wherein a difference in said expression indicates that the first individual has
8 colorectal cancer.

1 8. A method for screening for a bioactive agent capable of interfering with the
2 binding of a colorectal cancer modulator protein (colorectal cancer modulator protein) or a
3 fragment thereof and an antibody which binds to said colorectal cancer modulator protein or
4 fragment thereof, said method comprising:

5 a) combining a colorectal cancer modulator protein or fragment thereof, a
6 candidate bioactive agent and an antibody which binds to said colorectal cancer modulator
7 protein or fragment thereof; and

8 b) determining the binding of said colorectal cancer modulator protein or
9 fragment thereof and said antibody.

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1 9. A method for inhibiting the activity of a colorectal cancer modulator
2 protein (colorectal cancer modulator protein), wherein said colorectal cancer modulator
3 protein is encoded by a nucleic acid selected from the group consisting of a nucleic acid of
4 Table 1 or Table 2 or a fragment thereof, said method comprising binding an inhibitor to said
5 colorectal cancer modulator protein.

1 10. A method according to claim 9 wherein said inhibitor is an antibody.

1 11. A method of treating colorectal cancer comprising administering to a
2 patient an inhibitor of a colorectal cancer modulator protein, wherein said colorectal cancer
3 modulator protein is encoded by a nucleic acid selected from the group consisting of a
4 nucleic acid of Table 1 or Table 2 or a fragment thereof.

1 12. A method according to claim 11 wherein said inhibitor is an antibody.

1 13. A method of neutralizing the effect of a colorectal cancer modulator
2 protein, or a fragment thereof, comprising contacting an agent specific for said protein with
3 said protein in an amount sufficient to effect neutralization.

1 14. A method for localizing a therapeutic moiety to colorectal cancer tissue
2 comprising exposing said tissue to an antibody to a colorectal cancer modulator protein or
3 fragment thereof conjugated to said therapeutic moiety.

1 15. The method of Claim 14, wherein said therapeutic moiety is a cytotoxic
2 agent.

1 16. The method of Claim 14, wherein said therapeutic moiety is a
2 radioisotope.

1 17. A method for inhibiting colorectal cancer in a cell, wherein said method
2 comprises administering to a cell a composition comprising antisense molecules to a nucleic
3 acid of Table 1 or Table 2.

1 18. An antibody which specifically binds to a protein encoded by a nucleic
2 acid of Table 1 or Table 2 or a fragment thereof.

1 19. The antibody of Claim 18, wherein said antibody is a monoclonal
2 antibody.

1 20. The antibody of Claim 18, wherein said antibody is a humanized
2 antibody.

1 21. The antibody of Claim 18, wherein said antibody is an antibody fragment.

1 22. A biochip comprising one or more nucleic acid segments selected from
2 the group consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof, wherein
3 said biochip comprises fewer than 1000 nucleic acid probes.

1 23. A nucleic acid having a sequence at least 95% homologous to a sequence
2 of a nucleic acid of Table 1 or Table 2 or its complement.

1 24. A nucleic acid which hybridizes under high stringency to a nucleic acid of
2 Table 1 or Table 2 or its complement.

1 25. A polypeptide encoded by the nucleic acid of Claim 23 or 24.

1 26. A method of eliciting an immune response in an individual, said method
2 comprising administering to said individual a composition comprising the polypeptide of
3 Claim 25 or a fragment thereof.

1 27. A method of eliciting an immune response in an individual, said method
2 comprising administering to said individual a composition comprising a nucleic acid
3 comprising a sequence of a nucleic acid of Table 1 or Table 2 or a fragment thereof.

1 28. A method of determining the prognosis of an individual with colorectal
2 cancer comprising:

3 3) determining the expression of one or more genes selected from the group
4 consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof in a first tissue type of
5 a first individual; and

6 7) comparing said expression of said gene(s) from a second normal tissue type
from said first individual or a second unaffected individual;

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wherein a substantial difference in said expression indicates a poor prognosis.

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29. A method of treating colorectal cancer comprising administering to an
individual having colorectal cancer an antibody to a colorectal cancer modulator protein or
fragment thereof conjugated to a therapeutic moiety.

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2 30. The method of Claim 29, wherein said therapeutic moiety is a cytotoxic
agent.

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2 31. The method of Claim 29, wherein said therapeutic moiety is a
radioisotope.

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